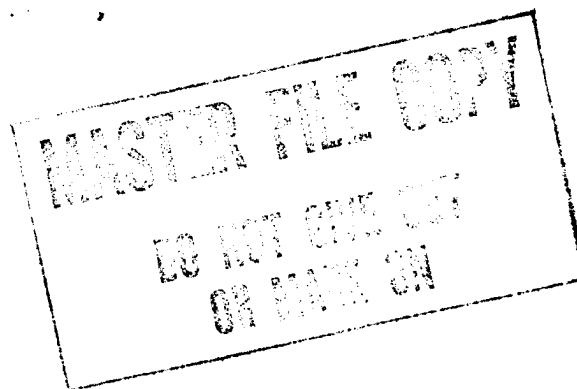




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# International Oil Market Outlook: Midyear Assessment

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# **International Oil Market Outlook: Midyear Assessment**

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**An Intelligence Assessment**

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Office of Global Issues. Comments and queries are  
welcome and may be directed to the Chief,  
Strategic Resources Division, [ ]

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**International Oil Market  
Outlook: Midyear  
Assessment**

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**Key Judgments**

*Information available  
as of 8 July 1983  
was used in this report.*

Recent gains in OPEC oil production and a firming in spot oil prices have signaled a return to more stable conditions in the oil market. OPEC members have largely followed the production and pricing guidelines set in March. Even non-OPEC producers appear determined to avoid triggering a price drop.

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Although non-Communist consumption has continued to fall and inventories are being depleted, the willingness of producers to cooperate and prospects for a sustained economic recovery should, in our view, cause prices to hold through December. In the absence of a sustained economic recovery and a resultant rebound in oil use, the willingness of financially pressed producers to hold the line on prices is likely to wane.

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Even if OPEC holds the line on prices through yearend, oil market conditions will remain soft and the cartel will continue to face a number of problems in the next year or so. One major hurdle will be the manner in which OPEC members establish quotas when demand exceeds the present 17.5-million-b/d ceiling. Because of pressing financial needs, we believe there will be a great temptation to produce too much too soon. If consumption continues to fall, major oil companies would accumulate excess inventories and cause a return to the weak market that prevailed in early 1982 and 1983. An unexpected end to the Iran-Iraq war in the coming months and attempts by these two countries to raise production would also sharply increase downward price pressures.

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## International Oil Market Outlook: Midyear Assessment

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### Introduction

The oil market has been in turmoil over the past two years as producers have attempted to adjust to sharp declines in revenues as a result of rapidly dwindling demand for oil. In an unprecedented move this past March, OPEC members cut the price of the benchmark crude, Arab Light, by \$5 per barrel and established an overall production ceiling of 17.5 million barrels per day for the group, nearly 14 million b/d below 1979 production levels. Despite the considerable differences among OPEC members especially concerning revenue needs, the group has generally adhered to the March production and pricing guidelines and prevented a major collapse in oil prices. Although some stability has returned to the oil market in recent weeks, the cartel has by no means regained control of the market. Whether the organization will prevent a further decline in prices over the coming year or so will depend on a number of factors, the most important of which is an increase in oil consumption. [redacted]

### Recent Trends

**Consumption Patterns.** The decline in oil consumption continues. [redacted] we estimate that non-Communist oil consumption fell by about 5 percent during first-quarter 1983, the 14th consecutive quarter that oil sales have declined from year-earlier levels. Partial data for the second quarter indicate that the decline in oil sales is continuing, albeit at a slower rate than in 1982. Oil consumption in the United States and Italy fell by 3 percent in April-May. During the same period oil sales in France approximated year earlier levels. [redacted]

In addition to sluggish economic activity in major industrial countries and continued conservation, several other factors have contributed to the decline in oil sales in recent months:

- Relatively warm weather from September to April caused heating requirements in the seven major developed countries combined to fall 10 percent below year-earlier levels.

- Appreciation of the dollar has pushed up imported oil costs in some foreign countries despite lower official oil prices. From January 1982 to January 1983, the price of imported crude oil in France and Japan, for example, rose 9 percent and 2 percent, respectively, while the average OPEC official sales price declined by 3 percent. (Crude oil prices are denominated in dollars.)

- LDC austerity programs also contributed to the drop in consumption [redacted]

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**Inventory Adjustments.** Industry expectations of a price decline caused a large inventory liquidation in recent months, contributing to the depressed demand for OPEC oil. We estimate that primary oil stocks fell by about 4 million b/d during the first quarter, nearly 500,000 b/d greater than the normal seasonal rate. As a result, non-Communist oil stocks on land declined to about 3.9 billion barrels at the end of the first quarter, about 92 days of forward consumption (table 1). We believe secondary and tertiary stocks—oil held by wholesalers, retailers, and users—were also drawn down in anticipation of an oil price decline. Because of the historic relationship between stock levels and consumption, stocks at the end of March were still above normal by about 100-200 million barrels, representing two to four days of forward consumption. Our estimate of consumption and current supply levels indicates that commercial inventories during the second quarter held roughly steady or declined by as much as 1 million b/d. This is in marked contrast to a normal seasonal buildup.<sup>1</sup> [redacted]

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<sup>1</sup> Because of historic seasonal fluctuations in the level of oil consumption, non-Communist primary oil stocks are normally accumulated during the spring and summer months. The buildup is usually about 1.5 million b/d during the second quarter and approximately 2.5 million b/d during the third quarter. These stocks are then depleted during the fall and winter to meet peak consumption needs. The drawdown is normally about 1 million b/d during the fourth quarter and about 3 million during the first quarter. [redacted]

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**Table 1**  
**Non-Communist Primary Oil Stocks on Land,**  
**End of Period <sup>a</sup>**

	Billion Barrels				Days of Forward Consumption			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1978	3.6	3.7	3.9	3.9	74	76	74	69
1979	3.5	3.8	4.2	4.3	72	78	81	82
1980	4.3	4.6	4.8	4.6	91	99	97	93
1981	4.5	4.6	4.7	4.6	101	104	100	96
1982	4.3	4.2	4.3	4.3	97	98	97	96
1983	3.9 <sup>b</sup>				92 <sup>b</sup>			

<sup>a</sup> Estimates include government-owned stocks in Japan and the United States that have increased from 18 million barrels in first-quarter 1978 to about 385 million barrels at end of first-quarter 1983. The increase amounts to about nine days of forward consumption.

<sup>b</sup> Estimated.

**Table 2**  
**OPEC Crude Oil Production**

Million b/d

	1982	1983								
		Quota	January	February	March	First Qtr	April <sup>a</sup>	May <sup>a</sup>	June <sup>a</sup>	Second Qtr <sup>a</sup>
<b>Total</b>	<b>18.8</b>	<b>17.5</b>	<b>17.0</b>	<b>14.9</b>	<b>15.9</b>	<b>15.9</b>	<b>15.9</b>	<b>17.4</b>	<b>17.4</b>	<b>16.9</b>
Algeria	0.6	0.725	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Ecuador	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gabon	0.2	0.15	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Indonesia	1.3	1.3	1.2	1.0	1.1	1.1	1.4	1.4	1.3	1.4
Iran	2.3	2.4	2.7	2.5	2.6	2.6	2.3	2.3	2.3	2.3
Iraq	1.0	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Kuwait	0.7	1.05	0.6	0.8	0.9	0.8	0.7	0.8	0.7	0.7
Libya	1.2	1.1	1.4	1.2	1.3	1.3	1.1	1.1	1.1	1.1
Neutral Zone	0.3	<sup>b</sup>	0.3	0.2	0.2	0.2	0.4	0.5	0.4	0.4
Nigeria	1.3	1.3	0.8	0.7	0.9	0.8	1.2	1.6	1.5	1.4
Qatar	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Saudi Arabia	6.3	<sup>c</sup>	4.6	3.6	3.6	3.9	3.9	4.6	4.9	4.5
UAE	1.2	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.2
Venezuela	1.9	1.675	2.1	1.8	2.1	2.0	1.7	1.7	1.7	1.7

<sup>a</sup> Preliminary.

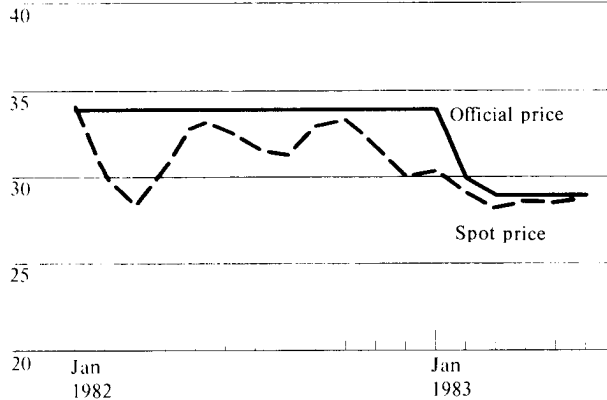
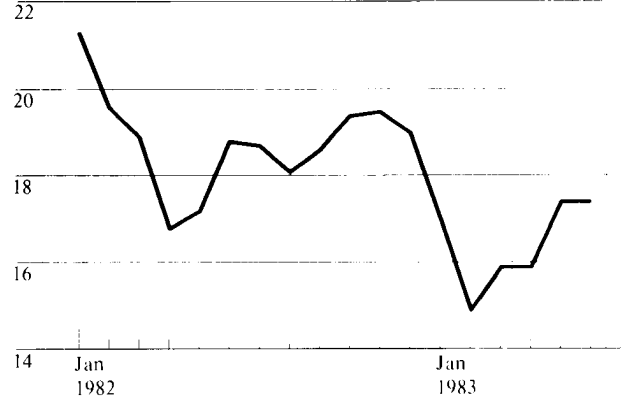
<sup>b</sup> Neutral Zone production is shared about equally between Saudi Arabia and Kuwait and is included in each country's production quota.

<sup>c</sup> Saudi Arabia has no formal quota; will act as swing producer to meet market requirements.

Note: Because of rounding, columns may not add up to totals shown.

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## OPEC: Crude Oil

Arab Light Prices  
US \$ per barrelProduction  
Million b/d

300087 7-83

**Production Trends.**

OPEC crude oil production in June averaged 17.4 million b/d, more than 1 million b/d above April levels and approaching the cartel's production ceiling of 17.5 million b/d set in March (table 2). Nigeria, the UAE, and Indonesia are the only nations to have exceeded their individual production quotas; second-quarter production in all three nations was close to 100,000 b/d above their ceilings. Saudi production in June rose 300,000 b/d from May to 4.9 million b/d.

Other OPEC producers—including Iran, Libya, and Venezuela—continued to produce within their allocation levels in support of the OPEC agreement.

Major non-OPEC exporters have also signaled their intentions not to undermine the price structure. According to statements made by senior Mexican oil officials, Mexico has adopted a temporary 1.5-million-b/d export ceiling even though Mexico is having financial problems and could export nearly 2

million b/d. The duration of this measure, however, remains unspecified. While maintaining output at near-capacity levels, the United Kingdom dropped prices only slightly in April.

**Recent Price Developments.** In addition to producer willingness to hold down production, a number of other factors have contributed to the stability of oil prices since OPEC lowered the official sales price of Arab Light crude oil by \$5 last March to \$29 per barrel and established production quotas (see charts):

- Buyer acceptance of the British National Oil Company's minimal price reduction in April and the lack of retaliatory cuts by Nigeria and other OPEC members helped firm prices.

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**Table 3**  
**Oil Price Trends 1983**

US \$ per barrel  
(end of month)

	February	March	April	May	June
<b>Arab Light</b>					
Official	30.00	29.00	29.00	29.00	29.00
Spot	28.00	29.00	28.85	28.60	28.90
Yield	25.54	26.57	28.02	27.31	27.49
<b>Kuwait Medium</b>					
Official	28.30	27.30	27.30	27.30	27.30
Spot	27.50	26.25	27.25	26.95	27.10
Yield	24.69	25.67	27.05	26.31	27.26
<b>Bonny Light</b>					
Official	30.00	30.00	30.00	30.00	30.00
Spot	28.00	28.50	30.00	29.75	30.20
Yield	26.54	27.82	29.40	28.81	29.65

- The Soviet Union and Egypt announced an increase in their official oil prices of about 50 cents per barrel effective 1 May, and both announced a further 50-cents-per-barrel increase effective 1 July. Soviet prices are now in line with the OPEC benchmark.

Spot crude oil prices continue to fluctuate around official prices. Arab Light prices are now only 10 cents below the official price, while spot crude prices for Bonny Light are running about 20 cents above the official level (table 3). We do not believe the modest spot price movements reflect a major market trend.

#### **Demand Outlook**

**Consumption Factors.** Oil market conditions during the remainder of this year will depend in large part on consumption trends. Predicting consumption patterns, however, is difficult:

- Forecasters have limited success in predicting the sharp decline in consumption during the past few years. Estimates differ on how much of the decline was due to conservation versus the recession. There

is also considerable uncertainty regarding the amount of additional investment in energy efficiency that is under way despite recent declines in real and nominal oil prices.

- The pace of economic activity and its impact on oil consumption are uncertain. Many forecasters believe a recovery will bring a rebound in oil use because increased activity in energy-intensive industries and oil's traditional role as a swing fuel should bolster oil demand.
- Accurate and timely data on end-user consumption of oil is not available. The apparent consumption measured by companies includes secondary and tertiary stock movements, the effect of which cannot be easily separated from actual oil use. If, as we expect, significant drawdowns of these stocks occurred in early 1983, a reversal in this trend could cause major international companies to overestimate final consumption in second-half 1983, unnecessarily boost imports, and wind up with excess oil stocks.

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**Inventory Behavior**

*The exact level of usable stocks held by companies is a function of their market outlook and company strategy as well as miscalculations in balancing supply and demand. In addition to minimum operating levels, compulsory stocks, and government-owned stocks, inventory levels include a residual that cannot easily be fine-tuned to match a company's financial objectives. Factors influencing stock decisions include:*

- *Estimates of future consumption levels, including the strength of economic recovery.*
- *Expectations about price movements.*
- *Expectations about supply availability, particularly stability in certain key oil-producing nations.*
- *The level of interest rates.* [ ]

- Fluctuations in currency exchange rates will cause oil prices, and hence consumption, to vary among countries. [ ]

**Consumption Outlook.** To assess the market outlook for the balance of 1983, we have examined two scenarios for oil consumption. Under our base case, we assume the economic recovery combined with erosion in real oil prices raises oil consumption to year-earlier levels in the fourth quarter. Although the OECD economies now appear to be pulling out of the recession, the recovery is neither uniform nor rapid. Most economic consulting firms expect growth in the United States and Japan, for example, to outpace growth in Western Europe. These same forecasters expect average OECD growth to approximate only 2 percent for the year. To accommodate the uncertainty about economic recovery and the possibility of continued high rates of conservation, we have also examined an alternative case that assumes that the rate of decline in oil consumption continues at its recent pace through 1983. Under both scenarios we assume LDC oil consumption remains relatively flat. In estimating annual oil consumption, we adjusted results from the CIA econometric model on the basis of our review of recent industry projections. In estimating quarterly oil demand, we constructed a set of quarterly growth rates consistent with the pattern of recovery forecast

[ ]

**Inventory Behavior.** Movements in oil inventories will play a key role in determining the level of oil demand for the balance of this year. Companies still have some leeway to reduce stocks and probably will strive to keep inventories at minimum levels. Our base forecast assumes that at some point in the next few months, however, inventory depletion will be halted, either because stocks will be approaching minimum levels or companies perceive that the price decline is over. Because they have different levels of inventories, some companies may have already ceased depleting stocks, which probably accounts for the recent rise in OPEC production. On balance, the resumption of normal inventory patterns later this year alone could raise oil demand by nearly 2 million b/d. Under our alternative case, we assume excess inventories remain through 1983 because international oil companies continue to overestimate future consumption levels, in part because of their inability to obtain accurate and timely data on end-user consumption of oil. [ ]

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**Near-Term Price Outlook**

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**The Base Case: Prices Hold.** Should oil consumption rebound and inventory patterns return to historic patterns during second-half 1983, demand for OPEC oil, including natural gas liquids, would increase to about 20 million b/d by the fourth quarter (table 4). Such an increase should help underpin the present pricing structure and lessen pressures for some OPEC members to cheat on their quotas. OPEC members appear determined to prevent a further slide in oil prices, and production controls would remain essential to maintaining price stability. We expect OPEC members to have difficulty apportioning new quotas once demand exceeds the present level. [ ]

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**Alternative Forecast: Price Weakness.** Should the lower consumption case materialize, demand for OPEC crude oil would average roughly 17.5 million b/d during second-half 1983, approximating the current OPEC ceiling. Under this scenario OPEC members would have difficulty preventing a further price decline. If OPEC production increases overshoot actual consumption levels, excess stocks would persist and spur another downturn in demand for OPEC oil this

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**Table 4**  
**Estimated Non-Communist Oil Supply and Demand**

Million b/d

	1982					Base Case				
						1983				
	I	II	III	IV	Year	I	II	III	IV	Year
Consumption <sup>a</sup>	47.5	44.0	43.2	44.6	44.8	45.0	42.5	42.8	45.4	43.9
Inventory change <sup>b</sup>	-3.3	-1.8		0.2	-1.2	-4.2	-0.8	1.6	-1.2	-1.1
Supply	44.2	42.2	43.2	44.8	43.6	40.8	41.7	44.4	44.2	42.8
Non-OPEC	23.3	23.6	23.8	24.4	23.8	24.1	24.2	24.4	24.4	24.3
OPEC	20.9	18.6	19.4	20.4	19.8	16.7	17.5	20.0	19.7	18.5

						Low Consumption Case				
Consumption						44.7	42.0	41.0	43.0	42.7
Inventory change						-3.9	-0.3	1.9		-0.6
Supply						40.8	41.7	42.9	43.0	42.1
Non-OPEC						24.1	24.2	24.2	24.3	24.2
OPEC						16.7	17.5	18.7	18.7	17.9

<sup>a</sup> Includes refinery gain.<sup>b</sup> Includes stock change afloat.

winter. Under these circumstances and without a sustained rebound in oil consumption, serious price pressures could return in early 1984, repeating the pattern of the previous two years. [ ]

Another key in the near-term market outlook will be the behavior of non-OPEC producers. Although oil market stability remains in their interest, we believe coordination with OPEC would wane if oil demand drops sharply:

- Renewed market weakness would pressure Mexico to lower prices, given its financial difficulties and its desire to sell up to its export capacity.
- The United Kingdom would face increased pressure to cut prices if sales plummet as a result of market weakness or attempts by other exporters to increase their market share.
- The Soviet Union would be among the first to shave prices to maintain volume and ensure vital hard currency earnings. [ ]

#### Pressure on Exporters

The financial strain facing most members of the cartel pressures each one to maximize production and exports without regard for the others. Even under our base case demand estimate for 1983, OPEC would experience a current account deficit of about \$30 billion. Only five OPEC states are likely to run a surplus in 1983—Kuwait, Qatar, Iran, the United Arab Emirates, and possibly Gabon. Most of the deficit countries are already in financial trouble and these problems could intensify, especially if the banking community moves to constrain lending to these countries. Should demand for OPEC oil fall 1 million b/d lower than our base case, the current account deficit would rise by about \$10 billion unless offsetting import cuts were made. [ ]

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major war between two members, and financial problems in some member countries, OPEC was able to reach an agreement on pricing and production that has basically been adhered to by all the participants:

- The Saudis accepted the role of swing producer and have been willing to bear the brunt of the decline in demand.
- Iran has largely abided by the production and pricing guidelines despite the ongoing war with Iraq and its political differences with other OPEC members in the Persian Gulf.
- Venezuela and Libya, two members that violated the 1982 OPEC accord, have adhered to the guidelines of the present pact.

OPEC has also been successful in attaining the apparent cooperation of such key non-OPEC producers as Mexico and the United Kingdom. [REDACTED]

Even though we believe this cooperation and a slight 25X1  
rise in oil demand will result in stable oil prices

through the end of the year, oil exporters are by no means out of danger of a price collapse. Given the financial difficulties faced by many producers, a sustained rebound in oil consumption will be needed 25X1  
to maintain cooperation and to avoid the temptation to cheat on pricing and production guidelines in an attempt to improve market share. Equally important will be the ability of OPEC members to establish new quotas once demand exceeds the present 17.5-million-b/d ceiling. We expect these negotiations to be difficult, and considerable pressure will be generated by several financially pressed members to obtain as large a share of the new quota as possible. The danger for OPEC would be to produce too much too soon, causing the accumulation of excess inventories and repeating the pattern of the past two years. If this were to happen, we would expect another crisis to develop early in 1984 when the market approaches the normal seasonal drop in oil consumption. [REDACTED]

The size of a possible supply glut—the excess of desired production over demand for OPEC oil—provides an indication of the potential for downward price pressures. To estimate OPEC's desired production level, we calculated the level of production each country needed to maintain total financial assets at yearend 1982 levels, assuming current prices hold. On this basis, we estimate that OPEC's desired production approximates 23-24 million b/d including natural gas liquids, nearly 5 million b/d above our base line demand estimate. Should OPEC members attempt to achieve this desired production level, prices would be likely to fall sharply, perhaps to \$20 per barrel or lower. [REDACTED]

#### Looking Ahead

The major factor behind OPEC's success in preventing a further drop in the price of oil these past few months has been the willingness of members to cooperate. Despite political differences in the Gulf, a

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OPEC's problems would be further compounded in the unlikely event that the Iran-Iraq war ends. Any attempt by Iran and Iraq to increase exports would put downward pressure on prices and force OPEC into difficult rationing decisions. While Iranian production is not constrained to its present level by the war, Iraq would require only four to six months after the war to increase exports by 1-2 million b/d. Even the anticipation of such an increase in supplies would soften the market and pose serious problems for producers attempting to maintain oil prices.

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